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PUBLIC OWNERSHIP VERSUS PUBLIC CONTROL

When it was first announced that the Citizens' Union of New York was entering upon a campaign to increase the range of municipal powers so as to include ownership and operation, among other things, of street railways, gas and electric-light service, it was regarded as something of a politico-economic sensation. The extraordinary feature was not the character of the proposition itself. Municipal ownership is no novelty, either as a theory in this country or as a practical accomplishment in Europe, especially in Great Britain. But that an organization of the civic prominence and influence of the Citizens' Union should select the opening months of a new Tammany administration to start the machinery at the state capitol for a constitutional amendment permitting these new city functions, was unique in American political history, to say the least.

Had the last municipal election in New York continued the reform administration in office, a suggestion for adding an immense new set of complex responsibilities and powers to the city government's activities certainly would have seemed less eccentric than coming, as it did, close upon the heels of the most striking demonstration ever afforded of the insecurity of clean, able, and nonpartisan government in the great "social experiment" city of the New World.

But these are points of political expediency rather than of principles at stake. The larger importance of any such movement does not lie in the sensational interest of an unpropitious launching, but in the fact that it raises again (and each time more seriously, whatever the outcome of the particular agitation) the issue of the wisdom and practical feasibility of taking the government into these exacting and complicated fields of industrial responsibility and management. This is, indeed, a large issue; and if a fresh discussion of it leads to nothing more concrete than the remedying of certain abuses in existing systems, and establishing more equitable and satisfactory relations between the com-

munity and public-service corporations, it will have been well worth while.

The demand for public ownership and operation of street railways, lighting facilities, etc., is often based upon the broad contention that the furnishing of "common necessities" ought logically to be in the hands of all the people. The argument is obviously careless, in that it would equally justify state production of wheat, sugar, coal, oil, meats, cotton, and wool—whatever, in fact, has come to be regarded as a "necessity" of life. The real distinction comes in when the article in question is not only a public necessity, but is supplied under practically monopolistic conditions. There is a separate grouping of industries of this class, which is recognized in the practical policies of virtually all civilized countries. From time immemorial governments have elected to take over the control and operation of so-called "natural monopolies;" whether it was the development of valuable natural products, especially rare mineral deposits, or, in more recent times, the furnishing of water supply, drainage systems, street-lighting, and even in some cases of public transportation and communication facilities. The instinctive appreciation that the peculiar character of such industries calls for and justifies something more than a *laissez-faire* policy is what underlay the very general support of the President's intervention in the coal strike. The act was unofficial, to be sure, but morally it had the effect of an assertion of the sovereign popular right to take a hand in the conduct of a virtually monopolistic industry supplying a necessity of life.

The principle has steadily become clearer that, where competition is impossible or ineffective, some outside agency is not only admissible, but necessary, to supply or compel the progressive improvement and the checks against extortion which natural conditions do not in such case afford; and since this interference is required in the public interest, what more natural than that the government, as the organized expression of the people's will, should be the intervening agent?

Much elaborate argument has been wasted in the vain effort to show that competition is really feasible under all conditions. But

public sentiment has become impatient of all such obviously specious reasoning in defiance of known facts. Competition between transportation lines, or gas and electric-light companies, or telephone systems, usually ends either in a price agreement, or a division of territory, or an outright consolidation of the rival corporations. Massachusetts has frankly recognized the humbug of competition in certain of these fields, and has even gone to the extent, as a recent decision of its Board of Railroad Commissioners, in a case at Springfield, witnesses, of declaring virtually that the monopoly is advantageous and should be protected; but such an expression from the source quoted must always be taken in connection with the all-important proviso that the monopoly operates under a very strict and comprehensive system of public control, and this is precisely what Massachusetts laws provide.

Here is where the real issue lies today. There is less and less effort to galvanize the corpse of competition in the public-service facilities of our cities, either in practice or in theory. Equally, there is less and less disposition to deny the public right to supply in some way the safeguards which competition would naturally afford if it were actually there. The vital question is on the *how*. And here begins the cleavage between the public-ownership proposition and public control.

It will be of interest to inquire into some of the experience of recent years, under both systems, in this country and abroad. So far as strictly municipal undertakings are concerned, Great Britain furnishes practically all the advanced experiments of large importance, and unfortunately the differences of opinion as to practical results are so pronounced, and the testimony so conflicting, that positive conclusions are in many cases difficult. Not only this, but in forming judgments very much depends upon whether the results under municipal operation at a given time are compared with previous private-management experience in the same community, or with present American experience under private management.

Take, for example, the famous case of Glasgow. The tracks of the street-railway system were the property of the city from the beginning, but were leased in 1871 to the Glasgow Tramway

& Omnibus Co., for twenty-three years. On November 12, 1891, the Town Council voted not to renew the lease, and entered into negotiations with the company for the purchase of its equipment. These negotiations fell through, and the municipality thereupon purchased an entire new outfit for a horse-car line—cars and horses, barns, ground, buildings, and machinery. Why was not an electric system installed, as it certainly would have been by any American private corporation taking possession of an urban transportation system so recently as 1894?

Mr. J. Shaw Maxwell, in a review of municipal-ownership experiments, in the *Co-operative Wholesale Societies' Annual* for 1902, says it was because there was not time enough in the two years after the negotiations with the private company collapsed to the date when the city had to begin operation, to purchase and install an electric plant. A different explanation is indicated in the very exhaustive and favorable account of the Glasgow tramways, to which the *Light Railway and Tramway Journal* (London) devoted almost its entire space in the issue of July 3, 1903. It appears that a special committee was appointed as early as July, 1891, to investigate methods of operation for the tramways, and a month later reported in favor of "mechanical traction;" but they could not agree on whether it should be electric, cable, compressed-air, or gas-motor.

The subcommittee were busy considering the question until after the following May, when they decided that it would be impracticable to start the service with mechanical traction, and that the safest course would be to start with horses and wait further developments in regard to the various forms of traction.

In October, 1902, offers were received for erecting and completing an electric installation, with all plant, appliances, rolling-stock, etc., necessary for working about eight miles of the tramways in the northern part of the city, including the Springburn route, on the overhead system, but the committee did not then see their way to recommend the acceptance of any of the offers.

Not until five years later was even a short experimental line authorized, and the principal reason seems to have been that "there was as yet no general consensus of opinion as to which was the best system of mechanical traction." The first test-line was

opened in 1898, and in the following year a complete change to the electric system was voted. The last horse-car was withdrawn from service in 1901.

There is a conflict of testimony also with regard to the financial results of the Glasgow undertaking. It appears that in the twenty-three years of the lease to the private company nearly \$1,700,000 had been expended on capital construction account, of which upward of \$980,000 had been paid off by the tramway company, which also had expended some \$617,000 on renewal of permanent way, and contributed about \$309,000 in clear cash profit to the city. Statements of percentages of profit made by the municipality since 1894 make a considerably better showing when the capital basis upon which they are computed includes (in addition, of course, to later expenditures) only the net debt upon the system at the time of the transfer, than when it includes, as it should, the total investment up to that time, of which almost two-thirds had been contributed free and clear by the operating company.

Another easy way of getting an erroneous impression of financial results is to compare the *average* annual payments to the "Common Good," or net profit fund, during the whole twenty-three years of the lease with the *annual* payments into that fund since 1894. By this method it appears that only about \$13,500 per year went to the city's profit account prior to municipal management, while in the first year after the change, 1894-95, the amount so paid was \$40,193; in the four succeeding years, \$43,794 each; in the next three, \$60,825; in 1902-3, \$121,650; and Mr. John Young, the general manager of the system, informs the writer that "it has been decided that this sum shall be paid over to the Common Good annually in future."

But the \$13,500 average for the twenty-three years before 1894 of course includes all the meager early years, from the time when the total capital investment of the system was less than \$17,000. If, instead of stating the payments to the "Common Good" as an average for the whole period, the figures are given year by year, as is done for the period since the lease, it appears that the amounts increased steadily prior to 1894 as well as since,

and in the last year under the old system amounted to over \$27,000; in the last thirteen months, over \$32,000. Further, it should not be overlooked that if Glasgow had been obliged, as any private corporation purchasing the plant would have been, to pay annual interest, say at $2\frac{1}{2}$ per cent., on the \$980,000 of capital investment which had been paid up by the private company, the amount available for Common Good would have been less by about \$24,500 each year than it actually has been since the city began operations. In other words, instead of \$43,794 from 1895 to 1899, it would have been about \$19,300 in each of those years; instead of \$121,650 today, it would be just over \$97,000.

On the other hand, on the basis of what the old company actually was accomplishing just prior to 1894, with the same unpaid capital debt to carry as that taken over by the city, the municipal management has steadily increased the net return to the "Common Good," and that with some reduction of fares, installation of a modern system, and altogether improved service.

And it is further to be noted that the movement toward municipalization of British tramways is steadily forging ahead. Huddersfield has been operating its own system since 1882; Plymouth and Blackpool, since 1893; Leeds, since 1894; Sheffield, since 1896; Liverpool, since 1897; while Manchester has only recently undertaken the same experiment, the largest of the kind in England, covering nearly 150 miles of trackage. In 1901, 56 propositions for municipalizing tramways were authorized, the estimated cost ranging from about \$23,000 to \$14,600,000. According to the *Board of Trade Returns* specially obtained on this subject in 1900, 70 out of a total of 177 tramway systems were then under public ownership and management, and these 70 represented a total expenditure on capital account of \$49,650,737, as against \$56,116,580 for the 107 private corporations.

The circumstance above all others which has made fairly satisfactory results possible, *as compared with the previous systems*, is the relatively high character of British municipal administration. Through long traditions of decency and much clarifying experience, these cities have developed the habit of picking men

of honorable reputation, business experience, and capacity for public service; and but for this fact it is altogether probable that the experiments would have proved disastrous failures. To cite a few cases by way of illustrating the average composition of the governing bodies of English municipalities: in 1901 the City Council of Birmingham contained forty manufacturers and tradesmen associated with the metal and cutlery trades; in Bromley nearly half the members were manufacturers and tradesmen, connected chiefly with the cotton industry; in Hull the shipping interests were strongly represented; in Huddersfield woolen manufacturers were prominent; in Sheffield the staple industry was represented in all its phases, from corporation directors to steel-workers and molders; in Glasgow the municipal corporation consisted of twenty-one merchants and shopkeepers, twenty-six manufacturers and tradesmen, sixteen professional men, four following no calling, while the great trading interests of the city were well represented.

In spite of all the favorable features, public opinion in Great Britain, while strongly tending toward municipal ownership in many quarters, is by no means a unit on the practical results achieved down to date. Mr. Maxwell himself, although a believer in municipalization, quotes a number of critical judgments; for example, that of Mr. Benjamin Taylor, in the electric railway number of *Cassier's Magazine*, that "generally speaking, the most perfect tramway system is procurable when the municipality owns the track and leases the lines to a company under municipal regulations." Mr. Taylor reviewed the experience of Glasgow, Huddersfield, Blackpool, Leeds, Sheffield, and Plymouth, and expressed the conviction that

In no single instance has it [municipal operation] been perfectly successful. Glasgow furnishes the nearest approach to success, but in Glasgow, with a small track for an enormous dependent population, it would take very bad management indeed to produce financial failure. . . . Any well-managed company, in possession of the advantages which any of these corporations [municipalities] whose work has been reviewed, possesses, would have, long ere this, produced much better results both for itself and for the public.

Whatever may be the conclusion, however, as to public versus private tramways in Great Britain, when we compare the results

under the very best of the municipalized systems with those realized in many of the larger American cities, the differences are pronounced. Dr. Albert Shaw, author of *Municipal Government in Great Britain*, who has sometimes been quoted as an advocate of municipal ownership, declared before a committee of the New York legislature: "I have never dreamed of advocating municipal ownership in the city of New York. I have never thought of it as a remedy." And, as to foreign cities: "I never believed any experience derived from them of any applicability to our cities." Mr. Charles Francis Adams, who was a member of the special Massachusetts investigating committee appointed in 1897, and whose right to speak with considerable authority on these matters is unquestionable, declares that he has "never yet found in Europe anywhere a case of municipal or public transportation worthy an instant's consideration as compared with our own." This has the appearance of an extreme view, to be sure; but concrete facts go a long way in support of it.

Suppose, for example, the comparison is made between the Glasgow experiment, which is decidedly the most favorable for municipal ownership that could be taken, and the Boston system, which, if it is indeed the best in the United States, has many a close second so far as practical operation is concerned, whatever may be said of the general fiscal relations with the community. Of that, more later.

Glasgow today has 139 miles of tramway, measured as single track. The population of the city is about 800,000; and in the financial statement and general account issued by the Tramways Committee the total population served, including the suburbs, is given as one million. The Boston Elevated Railway Co. operates, as a unit, some 440 miles of elevated, subway, and surface lines, and serves approximately the same aggregate population, including the suburbs. In other words, Glasgow has one mile of track for every 7,200 of population, in round numbers; Boston, one mile for every 2,270. The Glasgow system in 1902-3 carried 177,179,594 passengers; the Boston company carries about 236,000,000 paying passengers, of whom 130,000,000 use free transfers, making 366,000,000 separate trips furnished. The

average daily traffic is: Glasgow, 485,000; Boston, 1,000,000. The Glasgow rolling-stock consists of about 680 cars of all kinds; the Boston company owns over 3,300. The average number of cars operated in one day in Glasgow is now about 450; in Boston, 1,300. Thus Boston operates one car for every 770 passengers carried each day; Glasgow, one car for every 1,077.

This difference is reduced, however, by the fact that practically all the Glasgow cars are "double-deckers," seating from 50 to 55 passengers. A car seating 55 provides for 25 inside and 30 on the roof. The equipment of the Boston system is varied, including 174 elevated-railway cars seating 48 passengers, with comfortable standing-room for 50 more; nearly 1,600 surface-railway box-cars of different sizes, the great majority seating 34 passengers each; and more than 1,500 open cars for summer use, seating from 40 to 60 according to the number of benches. In winter, therefore, although Boston operates about 40 per cent. more cars in proportion to traffic than Glasgow, the average seating capacity of a car on the Glasgow system is greater than that of Boston surface cars by an even larger percentage; but this does not apply to carrying capacity. The standard surface car on the Boston system is 25 feet long, exclusive of platforms; in Glasgow, only 17 feet; which means, of course, less standing-room inside. And there can be little doubt as to which of the two evils is to be preferred, for winter travel—standing-room inside a warm car, or a seat on the roof, exposed to the cold and frequently to storms. This exposure to weather, by the way, is a permanent feature of "upper-deck" travel on the Glasgow cars, summer or winter; a second roof, or cover of any sort, has been found impracticable on account of the many bridges under which the cars must pass.

A new type of box-cars, the largest size that can be used on many of the crooked streets, and seating 36 passengers, is being installed on the Boston lines. And it is somewhat unjust to the Boston system, moreover, to estimate the average seating capacity solely on the basis of standard surface cars, even though there are 1,600 of these and only 174 of the elevated cars, which seat 48 each. An elevated car runs many more miles in a day than a

surface car, and hence handles a much larger relative proportion of the traffic. While there are less than one-ninth as many elevated as either type of surface cars, the mileage made by the elevated cars is more than one-sixth of the total made by the surface. This, of course, increases the average seating capacity of the rolling-stock as a whole.

In summer the average seating capacity of the elevated and open surface cars on the Boston system is nearly, if not fully, equal to that of the Glasgow cars, and this with protection from the weather, and without the delays and inconvenience in requiring passengers to climb to the roof. Double-deck cars were tried in Boston at one time, but abandoned because it was found impossible to handle heavy traffic with sufficient expedition; and it is chiefly on this account, in fact, that the street-railway judgment of this country has been, on the whole, against the use of this type of rolling-stock.

The Glasgow system, June 1, 1903, with 130 miles (measured as single track), represented a total capital investment of \$13,405,024, or \$103,115 per mile. The Boston system, including stock and bonds of leased lines, is capitalized at a little less than \$44,500,000; and if to this be added the cost of the city-owned subway, on which cost the company pays the interest and a liberal sinking-fund contribution, the total capital investment becomes approximately \$48,500,000, or \$110,227 per mile. There is no presumption of overcapitalization here, as compared with Glasgow, in view of the costly elevated and subway sections which form a part of the Boston service, and of the further fact that labor cost of construction in this country includes a wage-rate practically double that of Scotland, and which is only partially offset by the superior skill and energy of our workmen.

The Boston system, with earnings of about \$12,000,000 annually, pays a direct tax of seven-eighths of one per cent. on gross earnings, a state corporation tax of about \$16 per \$1,000 of market value of the stock, and local taxes on its real property, in the various municipalities through which its lines pass, ranging from \$15 to \$20 per \$1,000 of assessed valuation; and, in addition, is required to remove snow and ice from, and maintain the

paving on, the street surface occupied by its tracks. The interest which it pays on the cost of the subway is sufficiently in excess of the interest the city has to pay on the bonds issued for its construction, to retire the bonds and make the subway the city's property free and clear in less than forty years.

The total of these taxes and service obligations, and excess interest payment, now amounts to upward of \$1,550,000 a year, or nearly 13 per cent. of the gross earnings. Glasgow, with a street-railway revenue of \$3,178,471, in 1902-3, pair into the "Common Good" \$121,650; to which should be added the taxes which the municipality as a whole assesses upon the tramway property, amounting in 1902-3 to \$88,488. A further addition should be made of \$83,982, being the average annual payment by the Tramway Committee since 1894 into the sinking-fund for reduction of the capital debt; these payments, of course, are profit to the municipality, in that they give it that much clear interest in the property as an asset. The total of these payments which go to the public good is \$294,120, or slightly over 9 per cent. of the gross revenue. The Boston corporation, serving the same population as the Glasgow lines touch, pays to public-benefit account more than five times the gross amount so paid by the Glasgow system, and 39 per cent. more in proportion to earnings.

The question of fares cannot be considered apart from that of the amount of service furnished. What are the facts, then, as between Glasgow and Boston? Glasgow has a graduated scale of fares, ranging from 1 cent for a little over half a mile to 8 cents for 9 miles. The standard 5-cent fare in this country takes a passenger 5.8 miles in Glasgow. Needless to say, the confusion and complications of such a system, for the varying distances traveled, would prohibit it from meeting the demand for the utmost possible expedition on our large American city transit systems. Even more serious is the increasing rate of penalty it imposes upon the wide distribution of traffic, and hence upon the building up of workingmen's homes in the suburbs.

In Boston the uniform fare is 5 cents, and by means of the free-transfer privilege it is possible for this sum to ride from one end of the system to the other, fully 20 miles. Wage-earners and

clerks employed in the business districts can live 8 to 9 miles out and ride to and from their homes for 5 cents, while the Glasgow "suburbanite," to travel equal distances, if the lines extended that far, would have to pay 7 and 8 cents, respectively. A journey of 15 or 16 miles out from central points in Boston, by connection with outlying suburban lines, may be taken for 10 cents, and 20 to 25 miles for 15 cents. The same distances under the Glasgow rates would cost 13, 14, 18, and 22 cents, respectively.

The short-ride and congested-district character of the Glasgow service must be borne in mind in connection with the fact that the average amount received per passenger, based on the returns of annual earnings, is a little less than 2 cents. In Boston, counting the free transfer passengers, it is about $3\frac{1}{4}$ cents. But what is the effect of the sliding scale on Glasgow traffic? Simply, that the great bulk of the travel consists of short rides within the city limits. *Thirty-six per cent.* of the passengers pay 1-cent fares—that is, ride only half a mile; 56 per cent. pay the 2-cent fare, covering 2.33 miles; only 8 per cent. pay fares of 3 cents and upward; in other words, only 8 per cent. make journeys of more than 3.5 miles.

To be even more explicit: The most distant suburban point to which the Glasgow tramways extend is Paisley, 6.95 miles. To get there costs 6 cents, or 7 from the center of the city. The next farthest point is Clydebank, 6.39 miles; fare, 6 cents. Three other suburbs are between 4 and 5 miles, and one about $3\frac{1}{3}$. From Park Street station, Boston, a passenger may ride 9.53 miles to Arlington Heights for 5 cents; 9.83 miles to Charles River Bridge; 8.23 miles to Arlington Center; 8 miles to Waverley; 7.9 miles to the Melrose line; 7.36 miles to Milton; 7.3 miles to Neponset; 6.32 miles to Woodlawn; and 6.04 miles to Lake Street; and the uniform fare for any one of these journeys, or for any two of them in combination, through free transfer, is 5 cents.

The Glasgow system is not doing what it might and ought toward relieving the terrible congestion of workingmen's families huddled within the cramped distance limits. That the need of such distribution is great appears from the fact that more than

30 per cent. of the families in Glasgow, according to an investigation made a few years ago, were living in single rooms, as compared with about $1\frac{1}{2}$ per cent. in Boston.

But there is yet another most important consideration entering into this matter of fares—the question of wages. The relation of wage-rates paid, to the average fare charged, is twofold.

First: Wages are by far the largest item of operating expenses, and, as between two systems using substantially the same traction methods and carrying approximately the same number of passengers per car, the one paying the higher wages must necessarily charge a higher rate of fare. If the system paying the higher wages also operates more lines and furnishes a larger number of cars for the amount of traffic handled, all the more reason why the rates of fare must be higher.

Both Glasgow and Boston use the system of electric traction. Boston operates more than three times more track, and runs 40 per cent. more cars in proportion to traffic. How about the wages. The pay of motormen and conductors in Glasgow ranges from 97 cents per day during the first six months to \$1.22 after three years of service. In Boston surface-car conductors and motormen receive \$2.25; elevated motormen, \$2.30 the first year, \$2.40 the second, and \$2.50 the third; brakemen, \$1.85; guards, \$2.10; while all these employees receive 5 cents per day additional after five years of service, 10 cents after ten years, and 15 cents after fifteen years. These rates are about double those paid in Glasgow.

From the operating standpoint, therefore, whether it be in respect to wage expense, trackage operated, or amount of car movement, or all three, as is actually the case, there is abundant reason for higher average fares per passenger carried on the Boston system.

The second respect in which the wage matter relates to fares charged brings in the question of purchasing power. The differences between Boston and Glasgow street-railway wages reflect similarly wide differences between the general "run" of American and Scotch wages all along the line—not so great in some cases, of course; in others greater. It is one of the truisms of economics that prices are to be considered high or low, not abso-

lutely, but solely with reference to the purchasing power of the community, and in a community where wages are practically double the rates prevailing in another, an average fare of $3\frac{1}{4}$ cents would be, if anything, somewhat cheaper than one slightly under 2 cents in the other; at least, so far as concerns the army of wage-earners and clerks, and their families, who constitute the great majority of the patrons of any urban transportation system, and are the people to whom the matter of rates and service is of chief importance.

It may be urged, as accounting for some of the relative advantages of the Boston system, that it is surrounded on all sides by "feeder" electric roads which deliver passengers from an area including a considerably larger population than is brought into touch with the Glasgow lines. The fact is, however, that the bulk of the business from this wider area is handled by the suburban service of the steam railroads. Hundreds of trains each day, in and out of the two great terminals in Boston, accommodate an immense traffic, and not only from outlying points, but from stations directly within the territory of the Boston elevated, and in constant competition with it; so that the accounts are probably square in this respect. As a matter of fact, the proportion of traffic on the Boston Elevated Co.'s lines which does not originate within its own territory, compared with the total business, is small.

The reasonable deduction from these somewhat extensive comparisons seems to be that, while public ownership and operation of street railways, under the favorable civic conditions of British municipalities, in most cases give a better and cheaper service than was afforded by the various private corporations it supplanted, even this improved service is relatively meager in extent, and usually of mediocre quality, compared with American experience; and that the municipalized enterprises would break down entirely if subjected to any such tests as are commonly required under American conditions.

Glasgow was selected for comparison, as already observed, because it makes the best showing for municipalization, probably, to be found anywhere. In other British experiments results are

less favorable, some of them markedly so; but in few of them have the facts ever been presented with sufficient clearness and fairness to warrant any very precise comparisons. The experiment of the London County Council in constructing electric lines in the south of London is a case in point. It appears that in 1899 the council's experts estimated the expense of this undertaking at about \$1,242,000. It has only recently been completed, and proves to have cost some \$4,800,000. In consequence of this excessive expenditure, there seems to be a fair prospect, according to the chairman of the Finance Committee of the County Council, that the expenses, and charges against these lines, will exceed the income, and the deficit will have to be added to the tax budget. Thus far, the net returns to the council from the south London system have not been anywhere near so great as those from the leased lines on the north side; but, on the other hand, the fares are somewhat higher on the private lines, and the service in some respects not so good.

The same uncertainty exists in regard to municipalization of electric lights. The *London Times* presents statistics showing that during 1901 the city of Salford lost \$36,441 on the operating account alone of its electric-light plant, to say nothing of the charges on the \$908,803 invested. Bath lost \$6,024 in the same year, on a plant which was purchased for \$119,217, and upon which \$379,548 had been spent. Even after this expenditure, the works broke down, and the city tried in vain to sell the outfit to a private corporation. Bedford lost \$14,598 on operating account; Bristol, \$12,165; Morley, \$9,732; Glasgow, \$21,980; Edinburgh, \$13,089. These facts certainly are striking. Granting that the *Times* was conducting a campaign against municipal ownership, and hence did not give the statistics for cities which may have had more favorable experience, the specific cases here cited are of such importance as to destroy any warrant for asserting in general terms that "municipal electric lighting is a success in Great Britain." It would be impossible to make such a claim, even if all the other experiments were financially satisfactory.

Coming to the United States, the briefest statement of the situation shows how slight a hold the public-ownership idea has

obtained thus far. Chicago, it is true, has voted in favor of municipal ownership of the street railway, gas and electric-light plants; but in the present financial condition of that city there is little prospect of the proposal getting any farther. Thus far, only one community in the land owns and operates its own street railways, namely, Grand Junction, Colo., a town of less than 5,000 population. Of places of 3,000 population and upward, 193 are supplied with electric light by public enterprise, 1,190 by private; 20 operate municipal gas-works, 956 rely upon private companies; 1,465 have private telephone exchanges, while not one has embarked in this branch of municipal enterprise. Water-works and sewers, the two forms of municipal service requiring relatively the least of expert management and trained business judgment, are much more largely under direct municipal control; there being only 42 private sewerage systems against 1,045 public, and 661 private water companies against 766 public.

It is interesting to note that by far the larger number of municipally owned electric-light plants and gas-works are found in small places, where the conditions are relatively simple; very few of the large cities, where the demands of the situation are complex, extensive, and exacting, have tried the experiment. Of cities of 30,000 inhabitants and upward, only four conduct municipal electric-light works, and three municipal gas-works; while in places of 3,000 to 5,000 inhabitants, 111 electric-light plants are under public management, and seven gas-works. In the six largest cities—New York, Chicago, Philadelphia, St. Louis, Boston, and Baltimore—both electric light and gas are supplied by private companies, with the partial exceptions that Chicago furnishes her own electric-street lighting, and the Philadelphia gas-plant, although leased to a private corporation, is owned by the city.

The Philadelphia experiment in gas-making is one of the interesting cases of municipal mismanagement on a large scale. After many years of operation by the city, the plant had so deteriorated and the financial losses to the city had so accumulated, the gas supplied was so poor in quality and high in price, and the political manipulations of the "gas ring" (which Pro-

fessor Bryce says controlled 20,000 votes) became so notorious, that after a thorough legislative investigation the whole outfit was leased to a private corporation for a term of practically thirty years, or from December 1, 1897, to December 31, 1927. The conditions of the lease provided for a complete rehabilitation of the plant, declining price and improved quality of gas, and liberal annual cash payments into the city treasury.

In the four years previous to the making of this lease the expenditures incurred by the city in connection with operating the gas plant, including salaries of office employees, furnishing of street lamps, rentals, betterments, etc., exceeded the income by \$958,615.64, an average deficit of \$239,653.91 per year. The item of betterments during this period averaged \$365,-498.02 per year. In view of the condition the plant was in when taken over by the private company, it is a fair inference that the bulk of these so-called "betterments" were virtually waste, yielding very little actual improvement in the efficiency of the works. But if we waive that point, and credit the full amount of the betterments to the city as permanent improvement of the plant, the current operating account, disregarding the betterments outgo, showed an average annual surplus of \$125,844.11. In the six years after the lease the cash payments to the city by the private company, in consideration of the privileges granted it, amounted to \$2,600,523.12, or an average of \$433,420.52 per year. Thus the gain to the city on current operating account alone, under the lease, has amounted to an average of \$307,576.41 annually, as compared with the four previous years. The private company now makes all the betterments (which go to the city free and clear at the end of the lease), and these must amount to \$15,000,000 during the term of the lease, or an average of \$500,000 per year. Adding to these guaranteed betterments the net gain on current operating account, it would appear that the average annual gain to the city since the lease went into effect has amounted to \$807,576.41.

As a matter of fact, the company is making the bulk of the betterments in the first years of the lease. By the first of January, 1904, it had expended on this account a total of \$9,608,199.50.

And this does not tell the entire story. The company furnishes the city with gas for street-lamps and public buildings, free of expense, and is required to increase the number of street-lamps to the extent of 300 per year, as ordered by the City Council. At the same time, the average candle-power of the light supplied has increased from a range of from 19.04 to 19.47 in the four years preceding the lease, to a range of from 22.72 to 23 in the six years after the lease. The price per 1,000 feet is \$1, of which 10 cents goes to the city treasury. The city has the power to reduce the price to 90 cents, if it chooses to forego its own revenue of 10 cents; after 1907 it may reduce the rate to 85 cents; after 1912, to 80 cents; and after 1917, until the end of the lease, to 75 cents.

In addition, the item of making service connection and installing meters, part of which was formerly charged to the consumers, is now borne entirely by the private company. The city has the option of resuming possession of the plant January 1, 1908, but only upon condition of reimbursing the private company for all betterments made in the meantime. At the expiration of the lease the entire plant is to be turned over to the city, with all the betterments, free and clear. The issue of returning to city management or executing a new lease will then come before the city of Philadelphia, and if those who endured the service as it was before 1898 were to be the ones to do the deciding in 1927, there is little doubt what the verdict would be.

The experience of Boston a few years ago throws additional light on the difficulties of municipal ownership in this country. Under Mayor Quincy, a number of new municipal bureaus or departments were created, through which the city undertook to do its own printing, electrical construction, carpentering, and repairing, furnish its own ice, and so on. Under the succeeding administration of Mayor Hart, an experienced business man, it was found that, instead of proving sources of economy, these bureaus were veritable waste-pipes leading from the city treasury, and they were closed up as fast as possible, with the exception of the printing-plant, for which a satisfactory offer could not be obtained. Among other things, it was found, for example,

that the electrical equipment of a ferry-boat, which under private contract would have cost only \$6,800, cost \$10,200. Electrical work in the city building for hospital nurses cost \$4,754; by private contract it would have been \$1,528. Work on a city armory, which normally would have cost \$2,600, absorbed \$6,700 of the city's funds. Ice for public drinking-fountains, which private companies were furnishing at \$2 to \$3 per ton, was costing the city \$6.

Political appointees, numerically far in excess of the requirements of the service, and individually incompetent as a rule, had brought the bureaus to this extravagant pass; and it was virtually impossible to resist the drift in this direction, because the Common Council would not vote money enough to carry on the work of the departments, unless "places" were made for the favorites of the aldermen, as demanded. Chief Electrician William Brophy, of the Boston Wire Department, reported to Mayor Hart:

A glance at the pay-rolls show that nearly 60 per cent. of the men whose names they contain were appointed at the request of certain prominent gentlemen, who, to say the least, are not the best judges of the necessary qualifications of the employees of this department.

And among these employees, it is hardly necessary to add, there was a more or less general adoption of that leisurely gait which already has come to be known on the state-managed industries in New Zealand as the "government stroke."

Civil-service regulations proved no safeguard against these aldermanic raids, and the efforts to get around the rules were even carried to the extent of supplying a variety of ordinary employments with new and singular names for which no civil-service examinations existed!

On the general question of whether such abuses could be overcome, and a civil-service system devised which would provide a really satisfactory selection of employees for socialistic municipal enterprises, it seems high time to remark that the extent of effectiveness of any civil-service test, where more than somewhat perfunctory service is required, is very easily overestimated. It has become a sort of fetich in the popular mind, to such an extent that very many participants in this line of discussion have made

the tacit admission that *if* a rigid civil-service system could be established, it might then be feasible to place industrial enterprises under the management of government bureaus. But the truth is that no civil-service examination ever devised is adequate to select out industrial capacity, or catch in its meshes that indefinable, unclassified, evasive quality of practical genius which enables one man to take charge of a business undertaking and bring it through to success, while another, of equal or even superior technical knowledge, makes a total failure of the attempt.

Natural selection is the only method that has ever been found to develop the highest type of managing ability in the industrial field, and no feasible substitute for it has ever been proposed. How would it be possible, for example, to establish tests of business policy and management which should be regarded as the accepted "standards"? There are, in fact, no accepted "standards" of policy for the successful conduct of business enterprises. The conditions of success are not only constantly changing, but they are widely different at one and the same time, in different plants, according to the situation, character of the market, previous traditions of the business, and a hundred and one features irreducible to concreteness. What might be regarded as essential business principles in one situation, and made the basis of a general competitive examination, might yield a group of successful candidates notably unfit to conduct enterprises under the varied and changing conditions of other situations not covered by these established tests. On the other hand, it is doubtful if some of the most successful managers of modern industries could themselves pass an examination of the sort which would probably be regarded as necessary to select the best managing talent.

To bring all these considerations to bear against the municipal operation of complex industrial enterprises is not, however, to concede the entire case to the opposite contention of unlimited private control. There are grave abuses and inadequacies in private management, here and there, as well as under public enterprise, although usually of a different character, and capable of being remedied by other means than sacrificing the positive advantages and permanent incentives to efficiency and improve-

ment, furnished by the element of individual rewards and penalties. In other words, there is a middle ground of *public control*, to which attention may well be drawn, since here, indeed, is a really fruitful field.

The transportation system of Boston was selected for comparison with Glasgow intentionally, because it affords the best illustration in evidence anywhere of this attempt to solve the municipal-service problem along the lines of public control. The public control here exercised is both specific and general: that is, the Boston Elevated Co. operates under certain restraints and requirements imposed equally upon all street-railway corporations in the commonwealth, and in addition is subject to a comprehensive set of special regulations framed in recognition of the peculiar conditions of metropolitan transportation.

In addition to the various taxes already specified, whereby the public receives its contribution to the "Common Good," it is provided that, if any dividends are declared in excess of 6 per cent., an amount equal to the excess shall be divided among the cities and towns in which the company operates. In point of fact, whatever has been earned in excess of 6 per cent. thus far has been turned back into improvement and extension of the system, and this may be expected to continue for a number of years; the plans for development of the Boston transportation facilities are of a most comprehensive character, and the work is steadily in progress. The division of profits above 6 per cent. (8 per cent. in the case of all other street-railway companies) is probably the least important of the Massachusetts public-control features; it may possibly, however, act as some measure of protection of the Boston system and its present exceptionally public-spirited management, against becoming the prey of speculative interests ambitious to exploit the property solely for the quick profits to be got out of it.

The general body of Massachusetts street-railway legislation is very largely the outgrowth of an official investigation in 1897, by a special committee, whose report is perhaps the most valuable and suggestive that has appeared on the subject. This legislation is of an advanced character, providing very careful protection of

public interests and close supervision of quasi-public enterprises. As a matter of fact, for more than half a century Massachusetts communities have held the power of life and death over street-railway corporations, at short notice. The franchises of any such company are nominally perpetual, but they are subject to revocation at will in and by the communities through which its lines pass, the only appeal being to the State Railroad Commission. The commission may nullify the revocation, or sustain it if in its judgment the public interests so require, whatever the cause of complaint against the offending corporation.

In other words, a street-railway franchise in Massachusetts is what the investigating committee of 1897 termed a "tenure during good behavior;" the sole exception to this indefinite-term principle being in the case of the Boston Elevated Railway. In view of the extraordinary investment required for permanent plant, the Boston corporation holds perpetual franchises for the right of way of its elevated structures, subject only to revocation of its charter; and, by virtue of taking over the West End Street Railway, the Elevated Co. operates under a twenty-year lease of the subway, originally granted to the former corporation. The surface-line franchises, however, are revocable by the municipal authorities.

The State Railroad Commission is not only the final arbiter of life and death for street-railway companies, but it determines in the first instance, by careful inspection of the proposed routes, plans, etc., whether the capital stock to be issued corresponds with a fair estimate of the actual expense of construction to be incurred; and no corporation may issue stock in excess of that decision. All increases of stock must be authorized, and the price per share at which it may be sold to those already owning stock must be fixed, by the commission. The price so fixed must represent as nearly as possible the market value of the stock at the time. No certificate of original stock may be issued until the par value thereof has been paid in, in cash; and no stock or scrip dividends may be declared, or proceeds from the sale of stock divided among the stockholders; these restrictions apply to all public-service corporations. Bonds may not be issued by street-

railway companies until the Railroad Commission is satisfied that the value of the real and personal property of the company, for railroad purposes, exclusive of the value of the franchises, equals or exceeds the amount of capital stock and debt. These provisions render stock-watering virtually impossible.

The railroad commissioners, also, may nullify at their discretion any location granted through a street for a new street railway or extension of an old one, in case a majority in value of the owners of real estate on that street, or ten such owners, appeal to the commission within thirty days after the location is granted. Even after the work of construction is completed, operation may not begin until the commissioners have certified that the laws relative to its construction have been complied with, and the board's engineer has inspected the line in detail and found everything safe and adequate. Thereafter the commission may revise or alter any regulations of a street-railway company for the use of its road or cars; may determine how and to what extent cars shall be heated; and the companies forfeit \$25 for each trip upon which the cars are not so heated, unless the failure is due to an accident to the heating apparatus. The district police are required to enforce this provision. If the commission considers that additional accommodations are required, after due notice to the company it may order such additional accommodations, and after one week from the service of such notice, if the company neglects to provide them, it forfeits \$100 for each day of such neglect.

Transfer privileges may not be withdrawn except upon approval of the Board of Railroad Commissioners. The books of every railroad corporation must be kept in a uniform manner, upon a system prescribed by the commission, the accounts examined from time to time, and the results made public as the commission may consider expedient. Such examination and publication of results may be compelled at any time by application of any persons owning one-fiftieth of the paid-in stock of the corporation, or bonds or other evidences of indebtedness equal in amount to one-fiftieth of such stock—an important provision in protection of the minority stockholder, creditor, or bond-holder. A five-thousand-dollar fine is the penalty for refusal or neglect of any

such corporation to exhibit its books and accounts whenever the commission requires.

These are only illustrations of the far-reaching supervision exercised by the Massachusetts Railroad Commission. No other in the country is endowed with powers so sweeping; no other stands so high in reputation for ability, fairness, and unimpeachable honesty. Only because its extraordinary authority is never abused is it possible to continue that authority in active exercise. The commission is securely intrenched in the respect and confidence of all elements in the community; so much so that it has become in many cases a custom of opposing interests, corporate and otherwise, to refer controversies to it for decision; and, although the decision is often adverse to the corporation interests, sometimes to the extent of important and expensive changes in plant or equipment or method of operation, the commission still remains the preferred tribunal.

The general attitude of the present commission toward the street-railway problem is admirably summed up in a paragraph of its recent decision in the Springfield case, referred to. The commissioners say :

The operation of street railways in the larger municipalities has shown that the traffic within city limits can be handled with greater success and greater safety by one than by several companies. It will not do, however, for a company which receives the privileges of monopoly to forget the obligations which go with them. The public in such case can look to the one company only for needful extensions and additional accommodations. In response such company should be quick to meet all reasonable demands. When it undertakes to perform the entire public service, it must carry out the task.

The Massachusetts Commission consists of three men, appointed by the governor with the consent of the special advisory body known as the "Council," and each holds office for three years. Its integrity is preserved through two considerations: the virtual absence of attempts on the part of Massachusetts corporations to control it by influencing the election of a "friendly" governor, and the positive demand of public sentiment for a commission that shall be above criticism. To appoint to this commission a man open to suspicion of representing special interests would be hardly less disastrous to the future political prospects of

a public official than an attempt to "pack" the Supreme Court with political or corporate favorites.

It might be expected from all too familiar experience elsewhere that the power of revoking franchises would be in constant use as a club for blackmail extortion; and with a less active public conscience than still prevails, for the most part, in Massachusetts, it probably would be. But in the Bay State a liberally managed, law-abiding corporation is practically as sure of fair treatment and a long lease of life as if its franchises were absolute for twenty, thirty, or fifty years. In fact, the half-century of experience with revocable franchises was so satisfactory to all concerned that in all the hearings before the investigating committee of 1897 no request to change this feature was made by any municipality or corporation in the state.

Other public-service corporations are likewise under strict provisions of public control. Gas and electric-light companies are under the supervision of the State Board of Gas and Electric Light Commissioners, who have the power of examining accounts, etc. Telephone and telegraph corporations, and water companies, are under the state commissioner of corporations, who is also the commissioner of taxes. All issues of stock or bonds of any such corporations must be approved by these commissioners respectively, as the case may be, and must be on the basis that the amount is "reasonably necessary for the purpose for which such issue of stock or bonds has been authorized." Whenever the mayor of a city or selectmen of a town, or twenty customers, complain as to the price or quality of gas or electric light furnished, the Board of Gas and Electric Light Commissioners must notify the corporation and order a public hearing, and after the hearing may order such reduction of price or improvement in quality as the facts brought out may warrant. The price so fixed may not be increased, except that any corporation may apply for a new hearing, if it considers itself aggrieved.

The annual expenses of the Board of Railroad Commissioners and the Board of Gas and Electric Light Commissioners are charged upon the various railroad and gas and electric-light corporations, respectively, in proportion to their gross earnings.

All corporations in Massachusetts, of whatever kind, are subject to state taxation upon the value of their "franchises," representing the right to do business—an express assertion of the principle that the carrying on of an industrial enterprise is a social privilege rather than a fundamental or natural individual right. The value of the franchise is determined by the state tax commissioner, and is arrived at by taking the total market value of the stock of the corporation at the time of the assessment, and making certain deductions therefrom, as follows: In the case of a telegraph or railroad or street-railway company, the value of its real estate and machinery subject to local taxation within the commonwealth is deducted; also so much of the value of its stock as is proportional to the length of its lines lying outside the state. In the case of telephone companies, the value of the real estate and plant subject to local taxation within the state is deducted; also the value of all stock of other corporations held by a "domestic"¹ telephone company, and upon which a tax has been paid in Massachusetts or any other state for the preceding year; and so much of the value of the stock of a "foreign"¹ telephone company as is proportional to the number of telephones it owns or controls outside the state. In the case of all other corporations, manufacturing, etc., the value of real estate and machinery subject to local taxation is deducted. And it should be noted that the assessments for local taxation of corporations are subject to equalization or alteration upon proceedings which the state tax commissioner has power to compel.

The differences between the total market value of the stock and the various deductions specified is considered to represent the value of the franchise, and this is taxed at the same rate as that ascertained for the general state property tax in any given year.

That a system of public espionage and control so thoroughgoing and rigid as this should have given satisfactory results, on the whole, and without serious abuses, is a tribute to the relatively high standards of civic life and general political conditions maintained—not without exceptions, to be sure—in the common-

¹ "Domestic" corporation, organized under Massachusetts laws; "foreign," under laws of some other state.

wealth, and it would take considerable optimism to assume that similar regulations would work equally well everywhere—or even anywhere—else in the Union. The city of Boston is the danger spot, and source of constant menace to the just exercise of these extraordinary powers over corporate property; and many times there has been occasion to realize how narrow is the margin of safe control in the hands of decent elements, which prevents the legislative system from being converted into a weapon of plunder in the hands of professional blackmailers and “grafters.”

However, if Massachusetts has to fight at every step for the integrity of her public-control policies, where shall be found the justification for other and less favored communities rushing away beyond these limits to the extreme experiment of public ownership and operation? If an effective system of regulation cannot be maintained in our large cities, because of political corruption, what hope is there for the success of absorption outright, placing public-service facilities wholly in the hands of the selfsame political influences?

Public control retains the vital spark of individual enterprise and the incentive of private reward, which have kept alive the spirit of industrial progress and brought nearly all the material gains of civilization into being; and at the same time asserts in practical form the right of the whole community to hold self-interest within just bounds and guarantee to itself such benefits as its own contribution to the success of the enterprises entitles it to demand. There is “hard Yankee sense” in such a program. It does not violate the American idea of individual achievement. It has shown itself practicable under at least some American conditions. But the first task of the municipal reformer is to bring the general civic conditions themselves to some permanent and dependable plane of honesty, public spirit, and cleanness. If public control cannot succeed on any lower level than this, what would happen to public ownership?

HAYES ROBBINS.

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